DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022420 Address: 333 Burma Road **Date Inspected:** 04-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 14W (NWIT # 08727)

This QA inspector performed random Visual Inspection of the area previously tested and accepted by ZPMC/ABF Quality Control personnel. During random Visual Inspection, some cope holes are identified for grinding and are informed to AB/F QA personnel. AB/F will renotify CT for inspection after grinding. The members are identified as OBG Components. The designations reviewed are as Anchor Plate (AP) 3032A.

BAY 14, OBG 13CW (NWIT # 08725)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3015E-061, 062, 065, 066, 069, 070, 073, 074, 077, 078, 081, 082, 085, 086, 089, 090, 093, 094, 097, 098, 101, 102, 105, 106, 109, 110, 113, 114, 117, 118, 121, 122, 125, 126

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This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BB-020 [Top anchorage plate (AP) 3014A to Vertical Shear Plate sub-assembly SA3445A, CJP weld in between panel point PP125 to PP126]. The welder is identified as 045246 and was observed welding in 4G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020D-018 [Block out Bottom Plate Sub Assembly SA3416A to Floor Beam (FB) 3342A, Fillet weld at PP128.3]. The welder is identified as 069896 and was observed welding in 4F position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2114-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BB-002 [Top anchorage plate (AP) 3013A to Vertical Shear Plate sub-assembly SA3442A, CJP weld in between panel point PP125 to PP126]. The welder are identified as 067765 and 037932 and were observed welding in 4G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BB-074 [Top anchorage plate (AP) 3016A to Vertical Shear Plate sub-assembly SA3451A, CJP weld in between panel point PP125 to PP126]. The welders are identified as 069841 and 066261 and were observed welding in 4G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AV-006 [Block out Bottom Plate Sub Assembly SA3416A to Floor Beam (FB) 3343A, CJP weld at PP128.3]. The welder is identified as 066695 and was observed welding in 1G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2231-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang: 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By: Gaikwad,Umesh Quality Assurance Inspector **Reviewed By:** Peterson,Art QA Reviewer